## Site 12 summary – radiation

The original work plan for the Site 12 SWDA removals addressed non-rad contaminants at Site 12 in three solid waste disposal areas (SWDA): SWDA A and B, SWDA 1207/1209, and SWDA 1231/33. The Navy intended to address residential risk associated with dioxin, lead, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and methane (within SWDA A&B only) by removing soil in the areas up to 4 feet below ground surface. The excavation areas include residential housing common areas, back yards, and roadways. Soil beneath "hardscape" was not excavated. Sidewall and final excavation bottom samples would be collected and analyzed for the COCs.

The work plan required monitoring the excavations for radiological contamination through soil screening and sampling. Ra-226 was not a site COC; however, the Historical Radiological Assessment Report for NAVSTA TI (2006) identified Ra-226 as a radionuclide of concern and recommended site screening. Because of this, the work plan required scanning 50% of the soil during excavation. During scanning, anomalous readings were found and the decision was made to scan 100% of the soil per Class I MARSSIM. The work plan was revised to remove 1 foot of soil at a time, scan all soil (DART plus 32 soil samples/foot), and remove hot spots (DART survey → biased soil sample → elevated reading = "hot spot").

## Work Plan Changes after RAD:

- 100% DART screening
- 32 soil samples/1 foot lift in SWDA 1207/1209 and SWDA 1231/1233
- 64 soil samples taken per 1-foot lift in SWDA A&B
- surgical excavation for "hot spot" soil removals
- hand screening each excavated bucket of soil prior to loading for removal
- hand screen all concrete and asphalt prior to removal
- excavation of one area at a time (rather than three at once)

## Started December 2007

SWDA 1207/1209 ("Bayside Drive") – excavation and backfill complete – radiological walkover in areas adjacent to the SWDAs is complete – now surveying selected back yards

SWDA 1231/1233 ("Northpoint Drive") – radiological walkover in areas adjacent to the SWDAs is complete (one anomaly) – now surveying selected back yards

SWDA A & B ("Westside Drive") – work started September 25, 2007 – should finish end of 2009 – will do radiological walkover of adjacent areas

Next steps – confirmation sampling @ SWDA A&B, Final Status Survey